

Work Order ID 66412

Monday, February 14, 2011 4:44:16 PM

Page 1

Item ID: D206-642-441

Revision ID:

Item Name: Replacement Skidtube

Start Date: 2/15/2011 Start Qty: 1.00

Required Date: 3/1/2011 Req'd Qty: 1.00

Reference:

Accept

Setup Start

Stop

Cust Item ID:

Customer:

Approvals:

Process Plan: *mf*Date: *11-02-14*

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2650

Rev F

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D206-642-441 CHG002

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110



Skidtubes

Skidtubes

0.00

Memo

0.00

Skidtubes

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R ☐ Aluminum Rod

4-Grind weld flush to cap on top surface only.

5-Cut aft end 138.60" from front of tube

6-Drill pilot holes using drill jig DT8025 & DT8169 (A,B,C,D). Open to Ø0.312".

7-Drill holes for wearplates using DT 8028-7. Open to Ø 0.297".

8-Open using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-7 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtubes as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

> DP

11-3-1

m116577/m111385 BE 11/03/01

BE 11/03/01

BE 11-3-2

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

115

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

MA *11* *05* *03* *13*

116

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

5/10/03/04

(X)
QC only

120

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 *0* *BE 11/03/04*

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

11-3-4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open holes to finished size as per Dwg D2650, D2650-7 Drilling Detail
(without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-7 web in place as per QSI 015Ensure holes line upAllow 12 Hrs.
cure time before cutting☐Start Date: 11-3-4 ☐Time: ☐ 2:15 PM☐Finish Date: 11-3-7 ☐Time: ☐ 8 AMA/R ☐ Sikaflex-291 ☐ 1116046 ☐Sikaflex expiry date: ☐ 11-9-30

BE 11/03/04

JB

11/03/04

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

11-3-7

160

Skidtubes

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Prep per-QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod
A/R Aluminum Rod 11-3-85 BE 11-03-07

2-Grind welds flush as per Dwg D2650. 11-3-7

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650 Deburr 11-3-8

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Accept

**Setup Start**

Stop



Start Date: 2/15/2011 **Start Qty:** 1.00

**Cust Item ID:**

Required Date: 3/1/2011 **Req'd Qty:** 1.00



Customer:

Reference:

Run Start



Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Insp. Stamp

0.00



HandFinishing

0.00

Skidtubes

Memo

Skidtubes

Install D2680-041 Nut Plate as per Dwg D2650

QC10- Inspect visual per QSI004- ground welds

0.00



0.00

QC

Memo

Quality Control

QC5- Inspect part completeness to step on W/O

0.00



0.00

QC

Memo

Quality Control

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 3/1/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Pressure Wash per QSI005 4.3	0.00							
	HandFinish	0.00							
Hand Finishing	Memo Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.								1 BL 11-3-11
205	Spray Painting per QSI005 4.2	0.00							
	SprayPaint	0.00							
Spray Painting	Memo SPRAY PAINT DELFLEET BLUE PRIMER : B 115967 DELFLEET BLUE B 115985 CLEAR DELFLEET: B 117113								11 B 10 11 PAC
206	QC14- Inspect Spray Paint	0.00							
	QC	0.00							
Quality Control	Memo								74

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: DZ06-642-441 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: ✓ Date: 11/03/28

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>66412</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11-03-17	205	due to product line of delFleet changing to lower VOC's, supplier misinformed and sent wrong clear	11/03/18	scuff + re clear parts update QSE Flattening binder F3118 + 2:1 voc clear F3921 1 to 1 mixture F3118/F3921 mixture 3 parts to 1 part F3210 hardener + 1/2 part F3330 thinner	11-03-17	11/03/18	11/03/18	11/03/18

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 66412

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Item ID: D206-642-441

Accept



Setup Start



Revision ID:

Stop



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Start Date: 2/15/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 3/1/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 8 11/03/21 0.00				70			
250 Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D206-642-441 Location: _____ PPP Rev: <u>PPP66406</u>	0.00 0.00							
260 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

11/03/21 10

11/3/21

CY 11/03/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

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[illegible]

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

Washer

m 11680 S.

IX

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 2

Work Order ID: 66412

Parent Item: D206-642-441

Parent Item Name: Replacement Skidtube

Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3

Purchased

No

170

Each

154.0000

2

2



Cherry Rivet

Location

Loc Qty

Loc Code

ST311

154

112314

4

113539

44

113973

106



BEU/03/09
M117086 (2)

CR3212-4-03

Purchased

No

230

Each

1,863.000

2

2



Cherry Rivet

Location

Loc Qty

Loc Code

ST311

1863

110153

35

111359

5

112314

2

114436

448

114450

31

114859

1342



(2) DP 11-3-8

D2620

Manufactured

No

110

Each

19.0000

1

1



Skidtube, 206 Skidtube

Location

Loc Qty

Loc Code

LG

19

62684

7

64784

12



(1) DP 11-3-1

Monday, February 14, 2011 3:56:33 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Replacement Skidtube

Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2646 Manufactured No



Aft Cap

B 6 6401
110
55352

Location	Loc Qty
FP-4	6
57332	6
FP6	16
52663	3
62678	12
63633	1
Return 2010	54
62678	54

76.0000



Loc Code

m. 11/03/21
IX

ATTN: BLUE

D2647 Manufactured No



Cap

Location	Loc Qty
FP	55
55352	55

Loc Code

55.0000



BE 11/03/01

D2649 Manufactured No



Cross Bolt Spacer

170 Each

Location	Loc Qty
LG	243
58545	2
60652	4
61496	2
62889	11
63359	3
65317	221

243.0000



Loc Code

BE 11/03/07
23

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Shop Packet Print

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Parent Item Name: Replacement Skidtube

Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2651-1

Manufactured No

230

Each

511.0000

22

22



Plug

Location

B6644 5

Loc QtyLoc Code

FP

189

51530

152

X 62638 ✓

37

fpa

322

53349

205

57869

117



m-1 11/03/21

6

16

ATTN: BLUE

D2651-3

Manufactured No

230

Each

404.0000

22

22



O-Ring

LocationLoc QtyLoc Code

FP

404

*46114

12

61962 ✓

392



m-1 11/03/21

22

D2654-7

Manufactured No

160

Each

0.0000

1

1



Web

B67016

LocationLoc QtyLoc Code

ST021

18

55366

18



① DP 11-3-4

D2680-041

Manufactured No

170

Each

18.0000

1



Nut Plate



① DP 11-3-8

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Shop Packet Print

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Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-15	Manufactured	No	230	Each	3.0000	1	1	
Wearshoe								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP18	3	
63569 ✓	3	

D3535-23	Manufactured	No	230	Each	5.0000	1	1	
Wearshoe								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP021	5	
43400 ✓	4	
63571		

D3535-37	Manufactured	No	230	Each	7.0000	1	1	
Wearshoe								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	7	
56101	1	
62716 ✓	6	

D3536-15	Manufactured	No	230	Each	10.0000	1	1	
Gasket								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	1	
56055	1	
FP011	8	
63568 ✓	8	
FP11	1	
59238	1	

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Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-23 Manufactured No

230

Each

11.0000

1

1



Gasket



m-p 11/03/21

Location

Loc Qty

Loc Code

FP011

1

63570

1

ST

10

66240 ✓

10

1X

D3536-37 Manufactured No

230

Each

12.0000

1

1



Gasket



m-p 11/03/21

Location

Loc Qty

Loc Code

FP

12

63237

12

56102 ✓

1X

D3537-1 Manufactured No

230

Each

39.0000

6

6



Wearpad



m-p 11/03/21

Location

Loc Qty

Loc Code

FP017

39

65057

39

B50321

6

D3537-3 Manufactured No

230

Each

30.0000

1

1



Wearpad



m-p 11/03/21

Location

Loc Qty

Loc Code

FP17

30

65929

30

~~2564T~~

B30759

1X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, February 14, 2011 3:56:34 PM

Work Order ID: 66412

Parent Item: D206-642-441

Parent Item Name: Replacement Skidtube

Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08 Purchased No 230 Each 1,222.000 2 2
Screw

Location	Loc Qty	Loc Code
ST291	1222	
110835 ✓	367	
115108	855	



m-h 11/03/21

MS27039-4-06 Purchased No 230 Each 91.0000 1 1
Screw

Location	Loc Qty	Loc Code
ST292	91	
109061	4	
115460 ✓	87	



m-h 11/03/21

MS27039C1-08 Purchased No 230 Each 959.0000 60 60
SCREW

Location	Loc Qty	Loc Code
FP	63	
115336	63	
ST293	896	
115589 ✓	347	
116022	148	
116373	400	
19185	1	



m-h 11/03/21

60X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Picklist Print

Page 8

Monday, February 14, 2011 3:56:34 PM

Work Order ID: 66412



Parent Item: D206-642-441



Parent Item Name: Replacement Skidtube

Start Date: 2/15/2011

Required Date: 3/1/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

230

Each

3,062.000

60

60



m-l 11/03/21

Washer

Location

Loc Qty

Loc Code

ST297

3062

115000

125

115698

35

116025

132

116304 ✓

2770

60x

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW: INCCRP, DEO9136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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08-27-23

66412

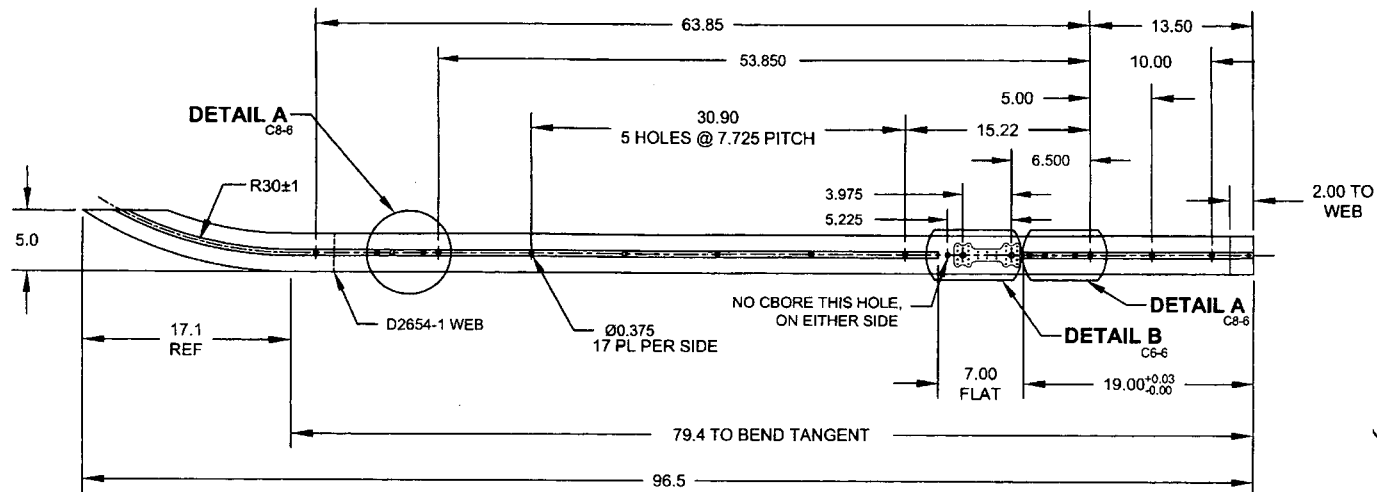
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

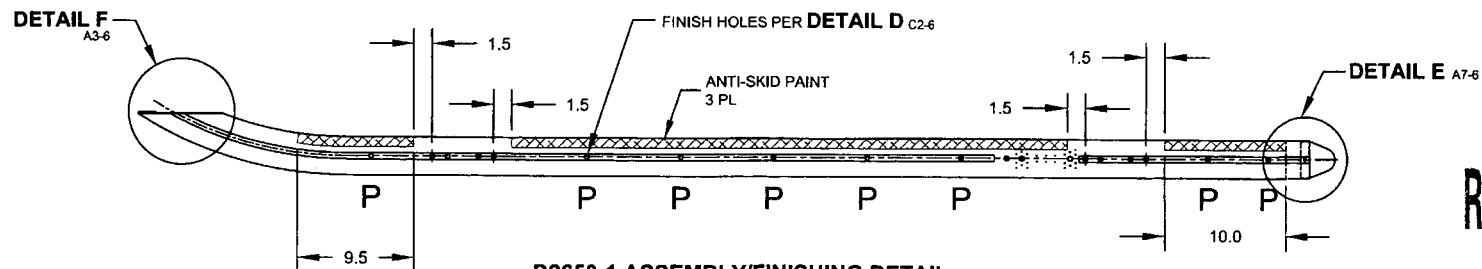
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2650-1 BENDING/DRILLING DETAIL



D2650-1 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2650	REV. F
MFG. APPR.		TITLE	SCALE
APPROVED		206/407 SKIDTUBE ASSEMBLIES	NTS
DE APPR.		COPYRIGHT © 1997 BY DART AEROSPACE USA, INC	
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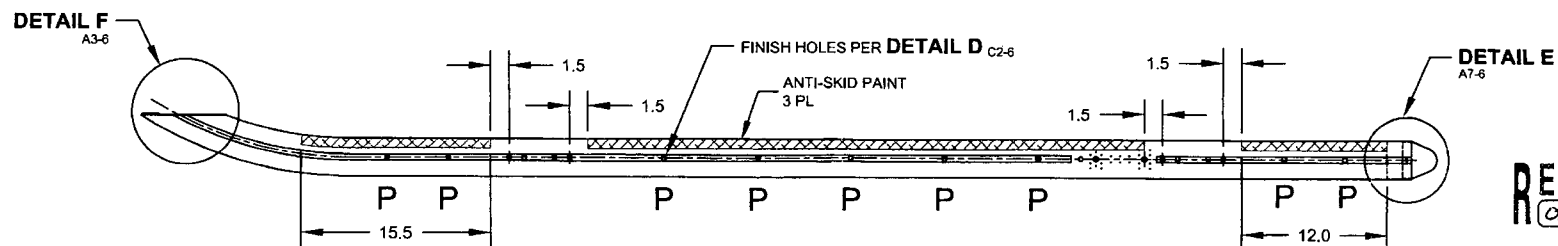
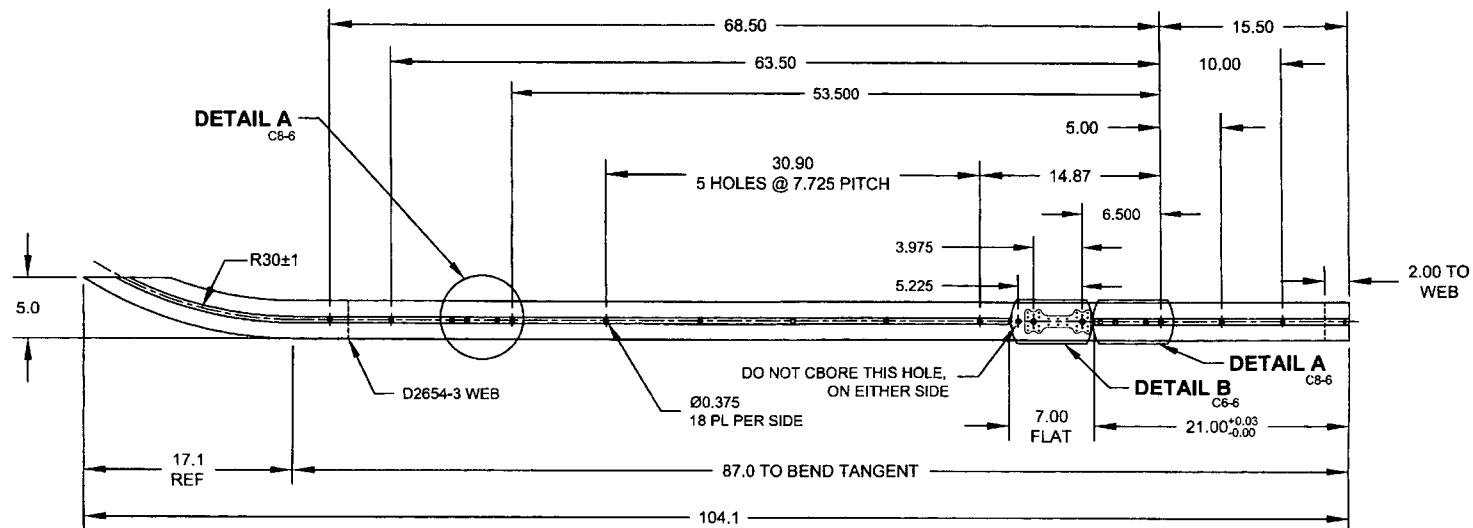
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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05 07 22 1/88

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	206/407 SKIDTUBE ASSEMBLIES	NTS
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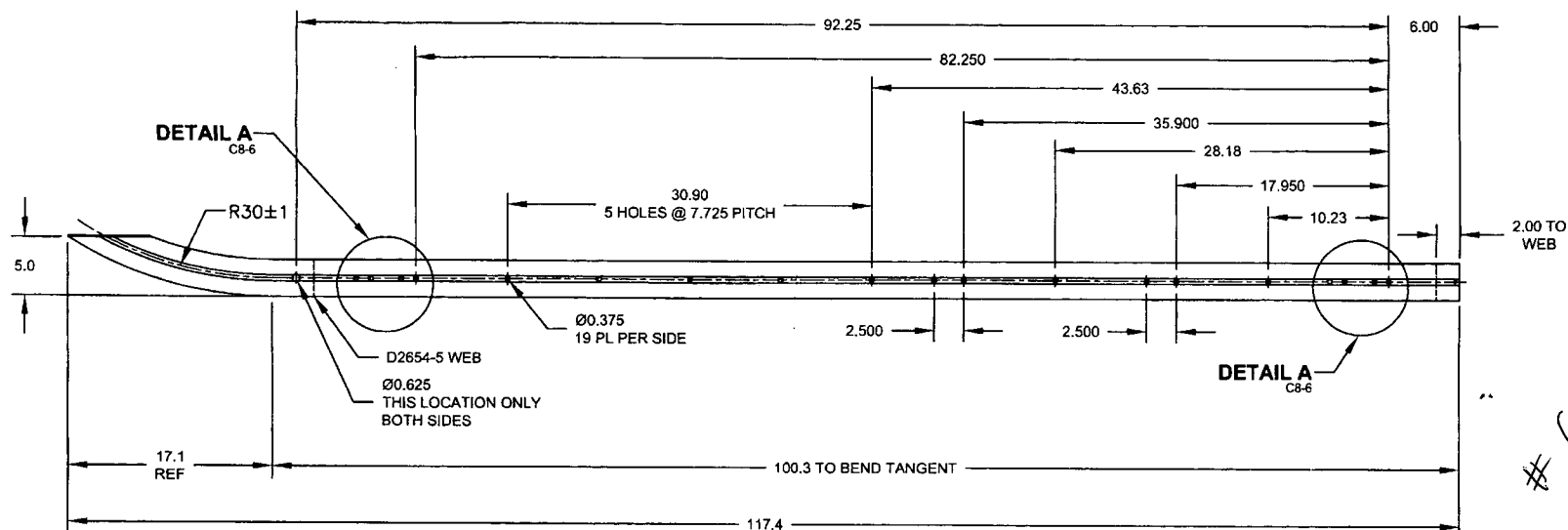
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

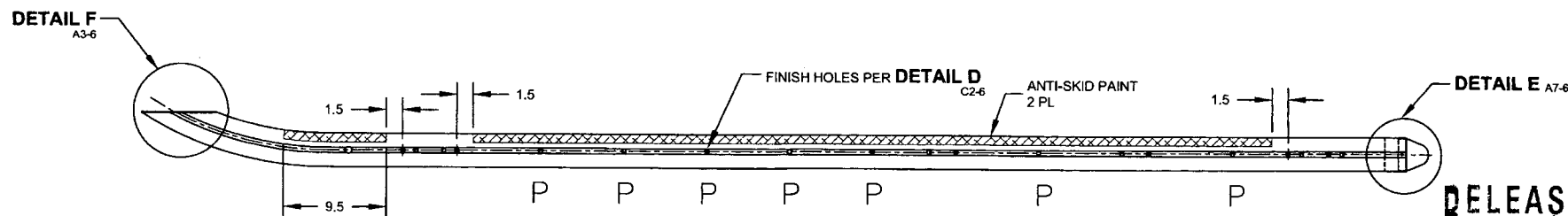
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			





NOTE: Date & initial all entries



D2650-5 BENDING/DRILLING DETAIL



D2650-5 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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08.09.22/117

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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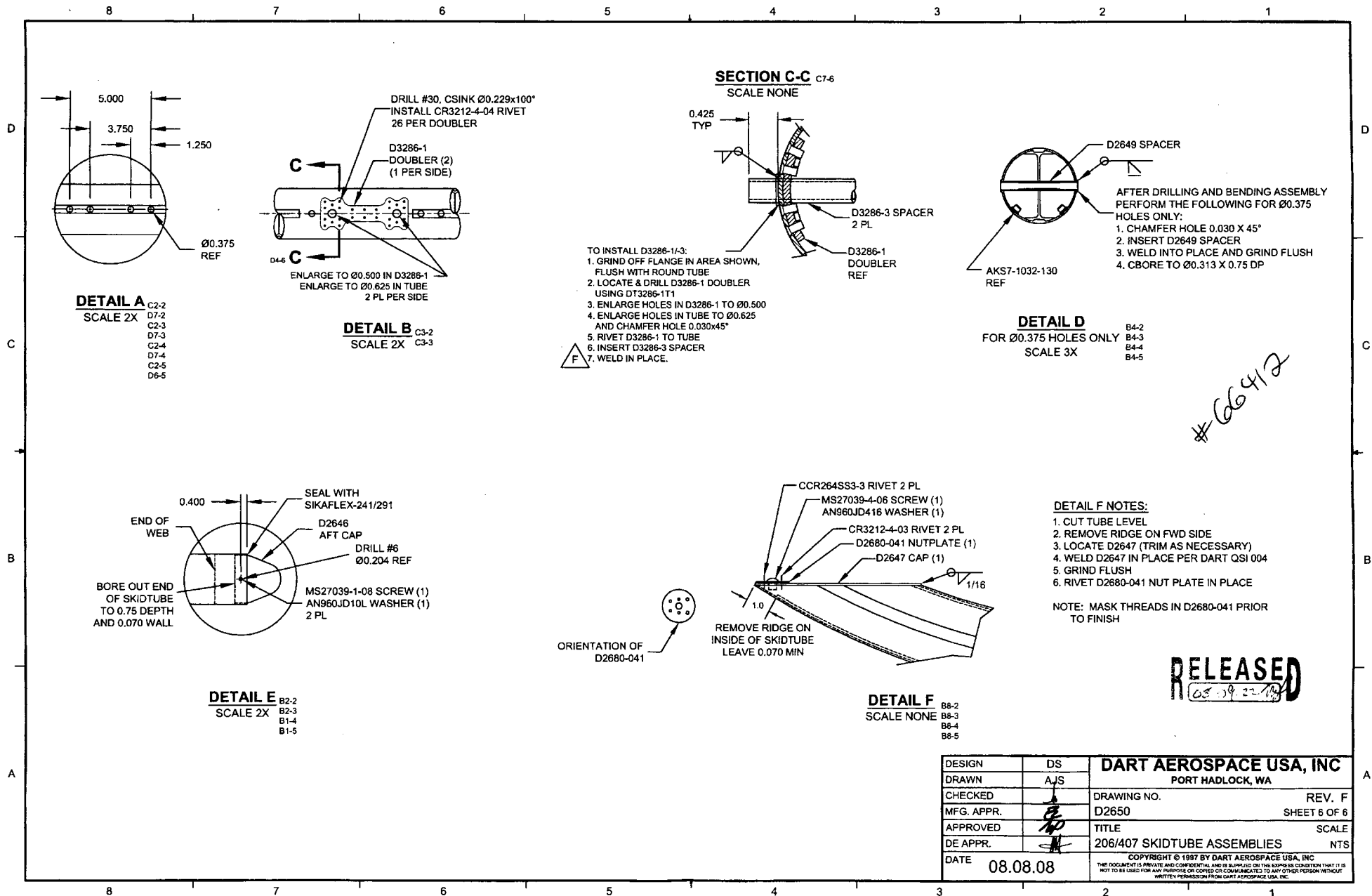
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 246

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 66462
Part number: D206-642-441
Description: 206 skid tube
Welding Process: Tig[☒] Mig[]
Base material: aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Lums Date of Test Coupon 11-03-09
Welder Barclay Elliott Date of Test Coupon 11-03-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Linda Lacelle

From: David Shepherd <dshepherd@dartaero.com>
Sent: March 18, 2011 11:14 AM
To: 'Marc Bellavance'; 'Linda Lacelle'
Subject: RE: D206-642-441B Skidtubes

Linda/Marc,

I was concerned that we had discovered a chemical incompatibility between the new paint and the clear and that is why we had to re-clear the skidtubes. Scuffing and re-clearing the skidtubes to a matte finish is acceptable to me.

David

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: Friday, March 18, 2011 9:04 AM
To: 'Linda Lacelle'; 'Shepherd, David'
Subject: RE: D206-642-441B Skidtubes

Linda, please call David, he has one or a few questions for you...

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: March 18, 2011 9:32 AM
To: 'Marc Bellavance'; 'Shepherd, David'
Subject: RE: D206-642-441B Skidtubes

The skids were already scuffed, and the new clear was applied...these are suppose to ship today

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: March 18, 2011 9:25 AM
To: Shepherd, David
Cc: Lacelle, Linda
Subject: D206-642-441B Skidtubes
Importance: High

Good morning David,

Ian came to see me this morning re Delfleet product line changing to lower VOC's. The supplier was misinformed and sent us the wrong clear. Now the skidtubes must be scuffed and re-cleared. Also, this will affect QSI 005 since the mixture must be changed. A W/O NCR has been filled out by Ian on all the W/O's (but we need your approval on this prior to signing off them off.

Call me if you have more questions, I'll answer with what I have and know about this issue.

Thanks,

Marc Bellavance
Technical/Shop Support